

Notice of Allowability**Application No.**

10/591,535

Applicant(s)

MARTIN, ROLAND

Examiner

JENNIFER SMITH

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to claim amendments and remarks submitted 06/22/2011.
2. ☒ The allowed claim(s) is/are 1,4,5,7,9 and 21-23.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 06/21/2011.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Jennifer A Smith/
Examiner, Art Unit 1731

DETAILED ACTION

Status of Application

Claims 2-3, 6, 8, and 10-20 are canceled.

Claims 24-33 are new.

Claims 1, 4, 5, 7, 9, and 21-33 are pending and presented for examination.

Examiner's Statement of Reasons for Allowance

Claims 1, 4, 5, 7, 9, and 21-33 are allowed. The following is an examiner's statement of reasons for allowance:

Applicant has amended claim 1 to overcome the closest prior art on record – Bickford. The Bickford reference teaches a process for the stabilizing of organic-containing electronic wastes [See Abstract]. The process includes:

mixing waste electronic components with a transition metal oxide catalyst, where the term "transition metal" is used in the customary sense to mean any of the elements having atomic number 21-29, 39-47, 57-79 and 89 or higher - however, oxides of other metals may also be useful for the practice of the invention. Suitable compounds for use with the invention include oxides of Ti, Cr, Mn, Fe, Co, Ni, Cu, Al, Sn, Mo, Pd, Ag, and Pt [noble and non-noble metals] [See Column 5, lines 8-17];

heating the mixture to temperatures of about 1050°C or higher [See Column 6, lines 10-17] to form a fluid [melted] glass mixture;

vitrifying the mixture by rapid cooling;

crushing or pulverizing the glassy material [See Column 8, lines 45-48];
metals are collected at the bottom of the melter may be drawn off and processed for re-use [See 28-31].

The Bickford reference teaches the material recycling process for use with wastes such as ion exchange resins, electronic components such as circuit boards, vacuum tubes, transistors and integrated circuits, and other wastes that contain organic compounds [See Column 4, lines 64-67] but fails to explicitly teach the processing of LCDs. Bickford does not teach LCD components within the claimed ranges. Applicant's remarks demonstrated unexpected results with regard to decreased energy usage and materials usage (furnace sand) when LCDs are used in the claimed percentages. Furthermore, one of ordinary skill in the art would not have been motivated to stabilize and/or recycle LCD waste with noble metals in the amounts as claimed.

In regard to new claim 24, Applicant has overcome the prior art reference's teachings. Claim 24 includes the transitional phrase "consisting essentially of" and defines the scope of a claim with respect to what unrecited additional components or steps, if any, are excluded from the scope of the claim. Bickford teaches the addition of metal oxides to produce favorable redox conditions and Applicant's process therefore excludes this step.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER SMITH whose telephone number is (571)270-3599. The examiner can normally be reached on Monday - Thursday, 9:30am to 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/JERRY A LORENZO/
Supervisory Patent Examiner, Art Unit 1731

/Jennifer A Smith/
Examiner, Art Unit 1731
August 8, 2011